State of Rhode Island



Debt & Pension Ratios Double A Rated States

October 27, 2016



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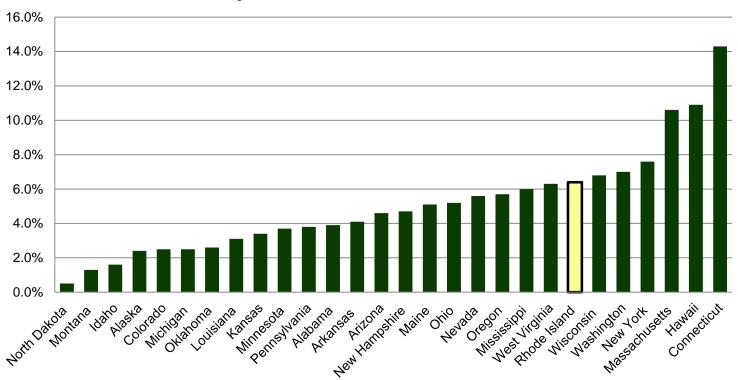
Rating Agency Ratios



Moody's Double A State Debt Service to Revenues



Moody's Debt Service to Revenues



 Note Alabama, Arizona & West Virginia Data based on fiscal 2014 revenues; fiscal 2015 audited financial statements not available at time of publication

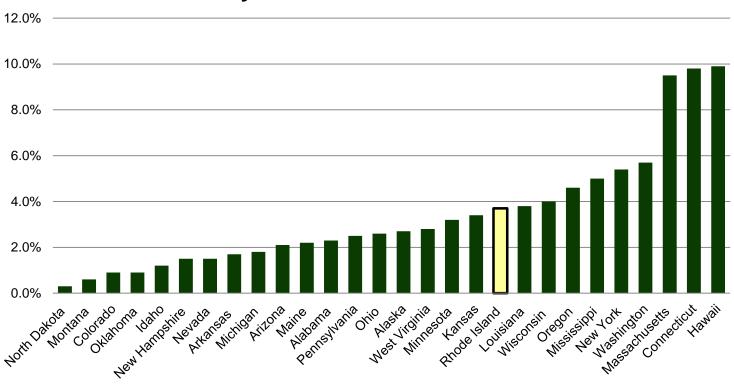
Source: Moody's State Debt Medians 2016, May 6, 2016.



Moody's Double A State Debt to Personal Income



Moody's Debt to Personal Income



 Note Alabama, Arizona & West Virginia Data based on fiscal 2014 revenues; fiscal 2015 audited financial statements not available at time of publication

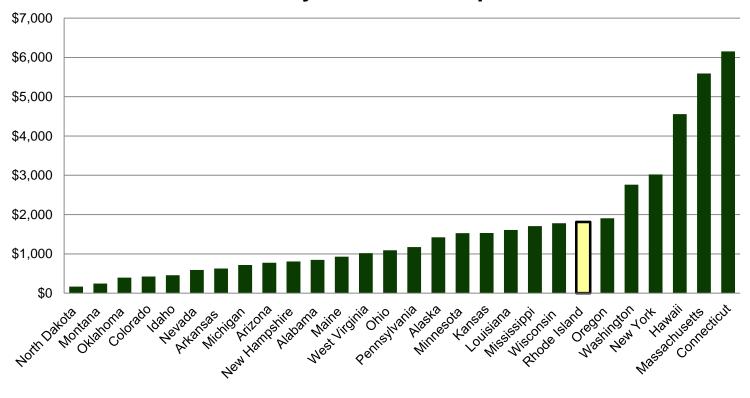
Source: Moody's State Debt Medians 2016, May 6, 2016.



Moody's Double A State Debt Per Capita



Moody's Debt Per Capita



 Note Alabama, Arizona & West Virginia Data based on fiscal 2014 revenues; fiscal 2015 audited financial statements not available at time of publication

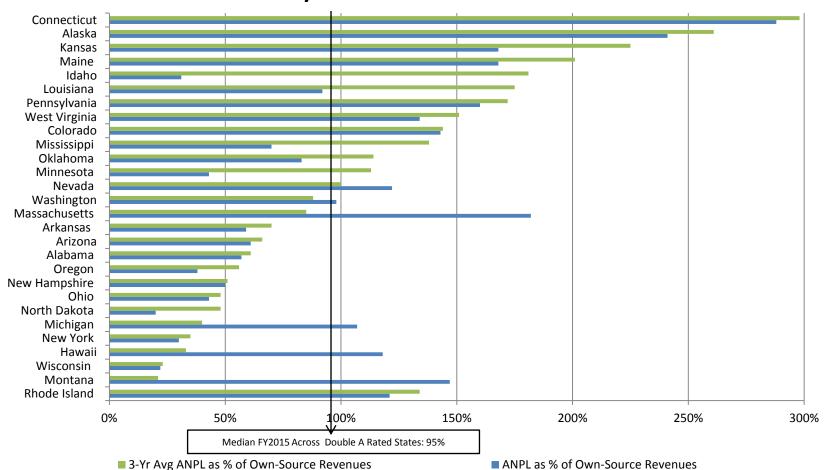
Source: Moody's State Debt Medians 2016, May 6, 2016.



Moody's Double A State Pension Medians



Moody's State Pension Medians



• Fiscal 2015 pension data is not directly comparable with previous years because of new accounting standards. For most states, the data are a restatement of 2014 liabilities and set a new baseline for the trend going forward. ANPL is adjusted net pension liability.

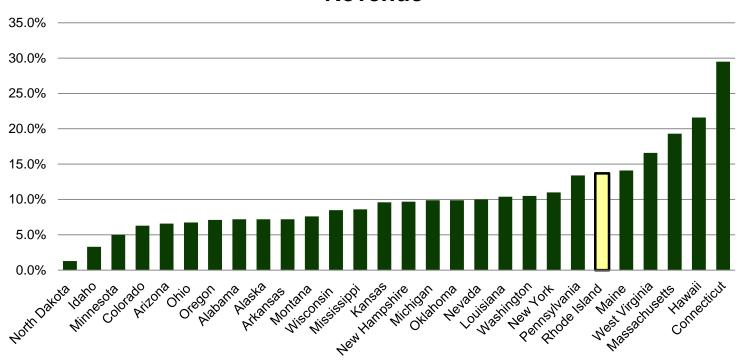
Source: Moody's US: Medians - Low Returns, Weak Contributions Drive Growth of State Pension Liabilities, October 6, 2016.



Moody's Double A Fixed Costs



Moody's FY 2015 Fixed Costs as % of Own-Source Revenue



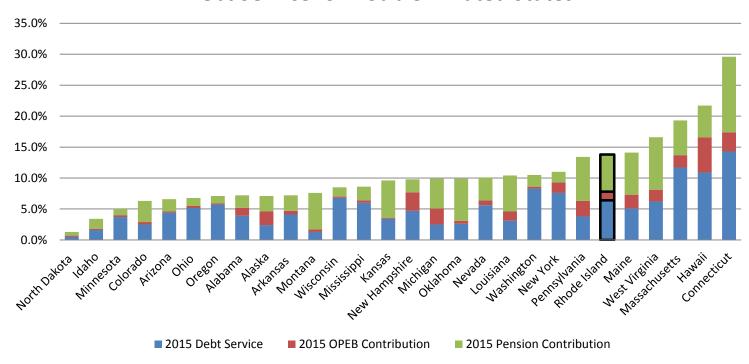
Source: Moody's US: Medians - Low Returns, Weak Contributions Drive Growth of State Pension Liabilities, October 6, 2016.



Moody's Double A Fixed Costs Breakdown



Moody's Fixed Costs Breakdown by Pensions, OPEBs, & Debt Service for Double-A Rated States



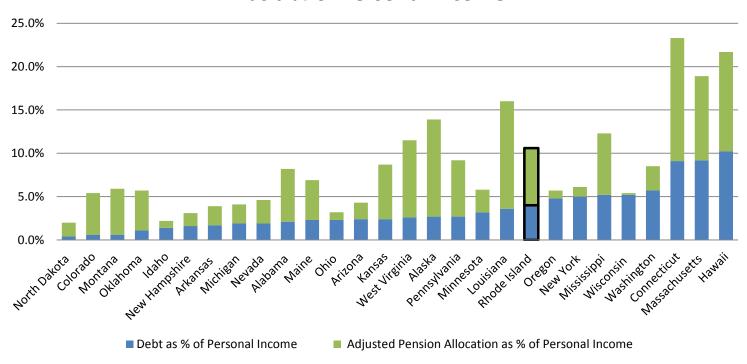
Source: Moody's US: Medians - Low Returns, Weak Contributions Drive Growth of State Pension Liabilities, October 6, 2016.



Fitch Double A Debt & Adjusted Pension Allocation



Fitch Debt & Adjusted Pension Allocation as a % of Personal Income

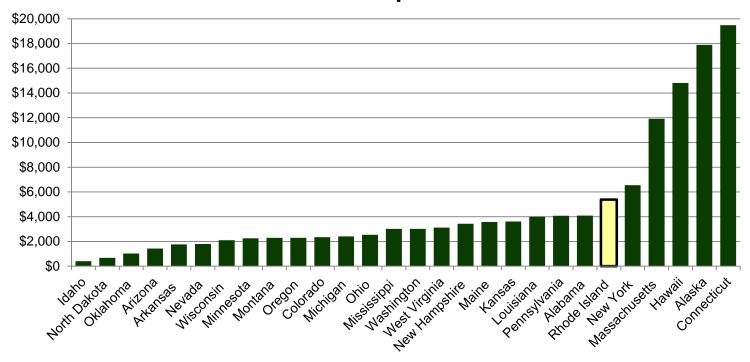


Source: Fitch 2015 State Pension Update, October 15, 2015.

S&P's Double A Total State Debt and Liabilities



Standard & Poor's Total State Debt and Liabilities Per Capita



Source: Standard & Poor's U.S. State Pensions: Weak Market Returns Will Contribute to Rise in Expense, September 12, 2016.



Appendix Rating Agency Ratio Details

Moody's State Debt Medians

State	Debt Service to Revenues	Debt to Personal Income	Debt Per Capita	Debt to Gross State Product
Rhode Island	6.4%	3.7%	\$1,813	3.51%
(Aa2/AA/AA)	0.470	3.770	Ψ1,013	3.3170
Alabama (Aa1/AA/AA+)	3.9%^	2.3%	\$849	2.06%
Alaska				
(Aa2/AA+/AA+)	2.4%	2.7%	\$1,422	1.85%
Arizona	4.6%^	2.1%	\$776	1.85%
(Aa2/AA/)**		2.170	· · · · · · · · · · · · · · · · · · ·	1.0370
Arkansas (Aa1/AA/)	4.1%	1.7%	\$628	1.56%
Colorado	2.50/	0.004	Ć424	0.760/
(Aa1/AA/)**	2.5%	0.9%	\$424	0.76%
Connecticut	14.3%	9.8%	\$6,155	8.82%
(Aa3/AA-/AA-) Hawaii			. ,	
(Aa1/AA+/AA)	10.9%	9.9%	\$4,557	8.56%
Idaho	4.60/	4.20/	ĆAFF	4.400/
(Aa1/AA+/AA+)	1.6%	1.2%	\$455	1.19%
Kansas	3.4%	3.4%	\$1,534	3.09%
(Aa2/AA-/)** Louisiana			. ,	
(Aa3/AA/AA-)	3.1%	3.8%	\$1,609	2.99%
Maine	5.1%	2.2%	\$928	2.27%
(Aa2/AA/AA)	3.1%	2.2/0	, 3 326	2.27/0
Massachusetts	10.6%	9.5%	\$5,592	8.34%
(Aa1/AA+/AA+) Michigan				
(Aa1/AA-/AA)	2.5%	1.8%	\$719	1.59%
Minnesota	3.7%	3.2%	\$1,527	2.64%
(Aa1/AA+/AAA)	3.770	3.270	Υ1, 321	2.04/0
Mississippi (Aa2/AA/AA)	6.0%	5.0%	\$1,707	4.88%
Montana				
(Aa1/AA/AA+)	1.3%	0.6%	\$247	0.58%
Nevada	5.6%	1.5%	\$591	1.26%
(Aa2/AA/AA+) New Hampshire			,	
(Aa1/AA/AA+)	4.7%	1.5%	\$808	1.53%
New York	7.60/	F 40/	ć2 024	4.200/
(Aa1/AA+/AA+)	7.6%	5.4%	\$3,021	4.29%
North Dakota	0.5%	0.3%	\$166	0.22%
(Aa1/AA+/) Ohio				
(Aa1/AA+/AA+)	5.2%	2.6%	\$1,091	2.20%
Oklahoma	2.6%	0.9%	\$397	0.85%
(Aa2/AA+/AA+)	2.070	0.570	, , , , , , , , , , , , , , , , , , ,	0.0370
Oregon (Aa1/AA+/AA+)	5.7%	4.6%	\$1,907	3.61%
Pennsylvania	2.00/	2.50/	A4 1=2	2 222/
(Aa3/AA-/AA-)	3.8%	2.5%	\$1,172	2.28%
Washington	7.0%	5.7%	\$2,761	4.68%
(Aa1/AA+/AA+) West Virginia			. ,	
Aa1/AA-/AA)	6.3%^	2.8%	\$1,020	2.53%
Wisconsin	6.8%	4.0%	\$1,780	3.55%
(Aa2/AA/AA)	0.670	4.U70	Ş1,/OU	5.3370

Source: Moody's State Debt Medians 2016, May 6, 2016

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[^] Figures based on fiscal 2014 revenues; fiscal 2015 audited financial statements not available at time of publication

^{**} Based on Issuer Rating, no GO Debt

Moody's State Pension Medians

Ribode Island	State	ANPL as % of Own-Source Revenues	3-Yr Avg ANPL as % of Own-Source Revenues	3-Yr Avg ANPL as % of Total Governmental Revenues	ANPL as % of Personal Income	ANPL as % of Gross State Product
	Rhode Island	121%	134%		9.7%	9.0%
		121/0	13470	0070	3.770	3.070
Inal_Parts Ina		57%	61%	35%	3.5%	3.2%
ARIZONS 61% 66% 35% 3.5% 3.2% 3.2% ARIZONS ARIZONS	Alaska (Aa2/AA+/AA+)	241%	261%	179%	32.4%	25.3%
Arkansas 59% 70% 39% 4.7% 4.5% Colorado 143% 144% 90% 7.1% 6.2% Connecticut (3a3/An-/An-) 288% 298% 209% 22.0% 20.5% Howaii 118% 33% 24% 12.0% 10.3% Howaii 118% 33% 24% 12.0% 2.6% Connecticut (3a3/An-/An-) 31% 181% 126% 2.7% 2.6% Connecticut (3a3/An-/An-) 168% 225% 119% 11.0% 9.9% Connecticut (3a3/An-/An-) 168% 225% 119% 11.0% 9.9% Connecticut (3a3/An-/An-) 168% 201% 125% 13.5% 13.5% 13.4% Connecticut (3a3/An-/An-) 168% 201% 125% 13.5% 13.5% 13.4% Connecticut (3a3/An-/An-) 168% 201% 125% 13.5% 13.8% 12.0% Connecticut (3a3/An-/An-) 107% 40% 28% 7.9% 7.1% Connecticut (3a3/An-/An-) 107% 40% 28% 7.9% 7.1% Connecticut (3a3/An-/An-) 138% 113% 61% 4.0% 3.3% Connecticut (3a3/An-/An-) 147% 21% 144% 11.2% 10.3% Connecticut (3a3/An-/An-) 147% 21% 14% 11.2% 10.3% Connecticut (3a3/An-/An-) 147% 148% 148% 22% 2.4% 1.9% Connecticut (3a3/An-/An-) 147% 148% 148% 22% 2.4% 1.9% Connecticut (3a3/An-/An-) 148% 148% 27% 2.2% 2.4% 1.9% Connecticut (3a3/An-/An-) 148% 148% 27% 2.2% 2.2% Connecticut (3a3/An-/An-/An-/An-/An-/An-/An-/An-/An-/An-	Arizona	61%	66%	35%	3.5%	3.2%
Colorado	Arkansas	59%	70%	39%	4.7%	4.5%
Connecticut	Colorado	143%	144%	90%	7.1%	6.2%
(A3/AA/AA)	Connecticut	288%	298%	209%	22.0%	20.5%
(AB1/AA/AA)						
(Aa1/AA/AA+) (Aa1/AA/AA) (Aa1/AA/AA+) (Aa1/AA/AA+) (Aa1/AA/AA) (Aa1/AA) (Aa1/AA/AA) (Aa1/AA/AA) (Aa1/AA/AA) (Aa1/AA/AA) (Aa1/AA/AA) (Aa1/AA/AA) (Aa1/AA		110/0		24/0	12.070	10.5%
(Aa2/AA/-)-** 169% 225% 119% 11.0% 9.9%		31%	181%	126%	2.7%	2.6%
Louisiana 92% 175% 108% 5.8% 4.8% (Aa3/AA/AA) 168% 201% 125% 13.5% 13.4% (Aa2/AA/AA) 168% 201% 125% 13.5% 13.4% (Aa2/AA/AA) 182% 85% 51% 13.8% 12.0% (Aa1/AA+/AA+) 182% 85% 51% 13.8% 7.9% 7.1% (Aa1/AA+/AA) 107% 40% 28% 7.9% 7.1% (Aa1/AA-/AA) 43% 113% 61% 4.0% 3.3% (Aa1/AA-/AA) (Aa1/AA-/AA) 70% 138% 81% 5.8% 5.7% (Aa1/AA-/AA) (Aa1/AA-/AA) 147% 21% 14% 11.2% 10.3% (Aa1/AA/AA+) (Aa1/AA-/AA+) 122% 100% 52% 4.9% 4.2% (Aa1/AA/AA+) (Aa1/AA-/AA+) 50% 51% 33% 2.3% 2.3% 2.3% (Aa1/AA/AA+) (Aa1/AA-/AA+) 30% 35% 22% 2.4% 1.9% (Aa1/AA-/AA+) (Aa1/AA-/AA+) 30% 35% 38% 3.1% 2.3% (Aa1/AA-/AA+) (Aa1/AA-/AA-) 43% 48% 27% 2.7% 2.2% (Aa1/AA-/AA+) (Aa1/AA-/AA-) 38% 56% 31% 2.8% 2.2% 2.4% 5.0% Onio (Aa1/AA-/AA-) 38% 56% 31% 2.8% 2.2% 2.2% (Aa1/AA-/AA-) 38% 56% 31% 3.2%		168%	225%	119%	11.0%	9.9%
Maine (Aa2/AA/AA) 168% 201% 125% 13.5% 13.4% (Aa2/AA/AA) 182% 85% 51% 13.8% 12.0% Massachusetts (Aa1/AA/AA) 107% 40% 28% 7.9% 7.1% Michigan (Aa1/AA/AA) 107% 40% 28% 7.9% 7.1% Minnesota (Aa1/AA/AAA) 43% 113% 61% 4.0% 3.3% Mississippi (Aa2/AA/AA) 70% 138% 81% 5.8% 5.7% Montana (Aa1/AA/AA+) 147% 21% 14% 11.2% 10.3% Nevada (Aa2/AA/AA+) 122% 100% 52% 4.9% 4.2% New Hampshire (Aa1/AA/AA+) 50% 51% 33% 2.3% 2.3% New York (Aa1/AA+/AA+) 30% 35% 22% 2.4% 1.9% North Dakota (Aa1/AA+/AA+) 48% 38% 3.1% 2.3% Ohio (Aa1/AA+/AA+) 48% 27% 2.7% 2.2% Oklahoma (Aa2/AA+/AA+) 48% 27%	Louisiana	92%	175%	108%	5.8%	4.8%
Massachusetts (Aa1/AA/AA+) 182% 85% 51% 13.8% 12.0% (Aa1/AA/AA) 107% 40% 28% 7.9% 7.1% (Ma1/AA/AA) 107% 40% 28% 7.9% 7.1% Minnesota (Aa1/AA/AA) 43% 113% 61% 4.0% 3.3% Mississippi (Aa2/AA/AA) 70% 138% 81% 5.8% 5.7% Montana (Aa1/AA/AA) 147% 21% 14% 11.2% 10.3% Nevada (Aa2/AA/AA+) 122% 100% 52% 4.9% 4.2% New Hampshire (Aa1/AAA) 50% 51% 33% 2.3% 2.3% New York (Aa1/AAA+) 30% 35% 22% 2.4% 1.9% North Dakota (Aa1/AA+/AA+) 48% 38% 3.1% 2.3% Ohio (Aa1/AA+/AA+) 43% 48% 2.7% 2.7% 2.2% (Aa1/AA+/AA+) 43% 48% 2.7% 2.7% 2.2% Oklahoma (Aa2/AA+/AA+) 83% 114%	Maine	168%	201%	125%	13.5%	13.4%
Michigan (Aa1/AA-/AA) 107% 40% 28% 7.9% 7.1% Minnesota (Aa1/AA-/AAA) 43% 113% 61% 4.0% 3.3% Mississippi (Aa2/AA/AA) 70% 138% 81% 5.8% 5.7% Montana (Aa1/AA/AA+) 147% 21% 14% 11.2% 10.3% Nevada (Aa2/AA/AA+) 122% 100% 52% 4.9% 4.2% New Hampshire (Aa1/AA/AA+) 50% 51% 33% 2.3% 2.3% New York (Aa1/AA-/AA+) 30% 35% 22% 2.4% 1.9% North Dakota (Aa1/AA-/A-) 20% 48% 38% 3.1% 2.3% Ohio (Aa1/AA-/A-) 43% 43% 27% 2.7% 2.2% Ohio (Aa1/AA-/AA+) 38% 114% 71% 5.2% 5.0% Oregon (Aa2/AA-/AA+) 38% 56% 31% 2.8% 2.2% Pennsylvania (Aa2/AA-/AA+) 160% 172% 108% 10.4% 9.5% Mashington (Aa1/AA-/AA+) 98% 88% 48% 6.1% 5.0% West Virginia (Aa1/AA-/AA) 134% 151% 91% 13.2% 12.2%	Massachusetts	182%	85%	51%	13.8%	12.0%
Minnesota (Aa1/AA+/AAA) 43% 113% 61% 4.0% 3.3% Mississipi (Aa2/AA/AA) 70% 138% 81% 5.8% 5.7% Montana (Aa1/AA/AA+) 147% 21% 14% 11.2% 10.3% Nevada (Aa2/AA/AA+) 122% 100% 52% 4.9% 4.2% New Hampshire (Aa1/AA/AA+) 50% 51% 33% 2.3% 2.3% (Aa1/AA+AA+) 50% 51% 33% 2.4% 1.9% New York (Aa1/AA+AA+) 30% 35% 22% 2.4% 1.9% North Dakota (Aa1/AA+/A-) 48% 38% 3.1% 2.3% Ohio (Aa1/AA+/AA+) 48% 27% 2.7% 2.2% Oklahoma (Aa2/AA+/AA+) 83% 114% 71% 5.2% 5.0% Oregon (Aa2/AA+/AA+) 38% 56% 31% 2.8% 2.2% Pennsylvania (Aa2/AA+/AA+) 160% 172% 108% 10.4% 9.5% West Virginia (Aa1/AA+/AA+) 134% 151%	Michigan	107%	40%	28%	7.9%	7.1%
Mississippi (Aa2/AA/AA) 70% 138% 81% 5.8% 5.7% Montana (Aa1/AA/AA+) 147% 21% 14% 11.2% 10.3% Nevada (Aa2/AA/AA+) 122% 100% 52% 4.9% 4.2% New Hampshire (Aa1/AA/AA+) 50% 51% 33% 2.3% 2.3% New York (Aa1/AA/AA+) 30% 35% 22% 2.4% 1.9% North Dakota (Aa1/AA+/AA+) 20% 48% 38% 3.1% 2.3% Ohio (Aa1/AA+/AA+) 43% 48% 27% 2.7% 2.2% Oklahoma (Aa2/AA+/AA+) 83% 114% 71% 5.2% 5.0% Oregon (Aa1/AA+/AA+) 38% 56% 31% 2.8% 2.2% Pennsylvania (Aa3/AA-/AA-) 160% 172% 108% 10.4% 9.5% West Virginia (Aa1/AA+/AA+) 134% 151% 91% 13.2% 12.2% Wisconsin 22% 23% 15% 15% 16% 14%	Minnesota	43%	113%	61%	4.0%	3.3%
(Aa1/AA/AA)	Mississippi	70%	138%	81%	5.8%	5.7%
(Aa1/AA/AA+)	Montana	147%	21%	14%	11.2%	10.3%
(Aa1/AA/AA+) 50% 51% 33% 2.3% 2.3% 2.3%	Nevada					
(Aa1/AA/AA+) 50% 51% 33% 2.3% 2.3% New York (Aa1/AA+/AA+) 30% 35% 22% 2.4% 1.9% North Dakota (Aa1/AA+/) 20% 48% 38% 3.1% 2.3% Ohio (Aa1/AA+/AA+) 43% 48% 27% 2.7% 2.2% Oklahoma (Aa2/AA+/AA+) 83% 114% 71% 5.2% 5.0% Oregon (Aa1/AA+/AA+) 38% 56% 31% 2.8% 2.2% Pennsylvania (Aa3/AA-/AA-) 160% 172% 108% 10.4% 9.5% Washington (Aa1/AA+/AA+) 88% 48% 6.1% 5.0% West Virginia Aa1/AA-/AA) 134% 151% 91% 13.2% 12.2% Wisconsin 22% 23% 15% 16% 1.4%				<u> </u>		1.2,0
(Aa1/AA+/AA+) 30% 35% 22% 2.4% 1.9% North Dakota (Aa1/AA+/) 20% 48% 38% 3.1% 2.3% Ohio (Aa1/AA+/AA+) 43% 48% 27% 2.7% 2.2% Oklahoma (Aa2/AA+/AA+) 83% 114% 71% 5.2% 5.0% Oregon (Aa1/AA+/AA+) 38% 56% 31% 2.8% 2.2% Pennsylvania (Aa3/AA-/AA-) 160% 172% 108% 10.4% 9.5% Washington (Aa1/AA+/AA+) 98% 88% 48% 6.1% 5.0% West Virginia Aa1/AA-/AA) 134% 151% 91% 13.2% 12.2% Wisconsin 22% 23% 15% 1.6% 1.4%	(Aa1/AA/AA+)	50%	51%	33%	2.3%	2.3%
(Aa1/AA+/) 20% 48% 38% 3.1% 2.3% Ohio (Aa1/AA+/AA+) 43% 48% 27% 2.7% 2.2% Oklahoma (Aa2/AA+/AA+) 83% 114% 71% 5.2% 5.0% Oregon (Aa1/AA+/AA+) 38% 56% 31% 2.8% 2.2% Pennsylvania (Aa3/AA-/AA-) 160% 172% 108% 10.4% 9.5% Washington (Aa1/AA+/AA+) 98% 88% 48% 6.1% 5.0% West Virginia Aa1/AA-/AA) 134% 151% 91% 13.2% 12.2% Wisconsin 22% 23% 15% 1.6% 1.4%		30%	35%	22%	2.4%	1.9%
(Aa1/AA+/AA+) 43% 48% 27% 2.7% 2.2% Oklahoma (Aa2/AA+/AA+) 83% 114% 71% 5.2% 5.0% Oregon (Aa1/AA+/AA+) 38% 56% 31% 2.8% 2.2% Pennsylvania (Aa3/AA-/AA-) 160% 172% 108% 10.4% 9.5% Washington (Aa1/AA+/AA+) 98% 88% 48% 6.1% 5.0% West Virginia Aa1/AA-/AA) 134% 151% 91% 13.2% 12.2% Wisconsin 22% 23% 15% 1.6% 1.4%		20%	48%	38%	3.1%	2.3%
Oklahoma (Aa2/AA+/AA+) 83% 114% 71% 5.2% 5.0% Oregon (Aa1/AA+/AA+) 38% 56% 31% 2.8% 2.2% Pennsylvania (Aa3/AA-/AA-) 160% 172% 108% 10.4% 9.5% Washington (Aa1/AA+/AA+) 98% 88% 48% 6.1% 5.0% West Virginia Aa1/AA-/AA) 134% 151% 91% 13.2% 12.2% Wisconsin 22% 23% 15% 1.6% 1.4%		43%	48%	27%	2.7%	2.2%
Oregon (Aa1/AA+/AA+) 38% 56% 31% 2.8% 2.2% Pennsylvania (Aa3/AA-/AA-) 160% 172% 108% 10.4% 9.5% Washington (Aa1/AA+/AA+) 98% 88% 48% 6.1% 5.0% West Virginia Aa1/AA-/AA) 134% 151% 91% 13.2% 12.2% Wisconsin 22% 23% 15% 1.6% 1.4%	Oklahoma	83%	114%	71%	5.2%	5.0%
Pennsylvania (Aa3/AA-/AA-) 160% 172% 108% 10.4% 9.5% Washington (Aa1/AA+/AA+) 98% 88% 48% 6.1% 5.0% West Virginia Aa1/AA-/AA) 134% 151% 91% 13.2% 12.2% Wisconsin 22% 23% 15% 1.6% 1.4%	Oregon	38%	56%	31%	2.8%	2.2%
Washington (Aa1/AA+/AA+) 98% 88% 48% 6.1% 5.0% West Virginia Aa1/AA-/AA) 134% 151% 91% 13.2% 12.2% Wisconsin 22% 23% 15% 1 6% 1 4%	Pennsylvania	160%	172%	108%	10.4%	9.5%
West Virginia Aa1/AA-/AA) 134% 151% 91% 13.2% 12.2% Wisconsin 22% 23% 15% 1 6% 1 4%	Washington	98%	88%	48%	6.1%	5.0%
Aa1/AA-/AA) Wisconsin 22% 23% 15% 16% 14%	West Virginia					
		22%	23%	15%	1.6%	1.4%

Source: Moody's US: Medians - Low Returns, Weak Contributions Drive Growth of State Pension Liabilities, October 6, 2016. ANPL is adjusted net pension liability * Fiscal 2015 pension data is not directly comparable with previous years because of new accounting standards. For most states, the data are a restatement of 2014 liabilities and set a new baseline for the trend going forward.

Public Resources Advisory Group

^{**} Based on Issuer Rating, no GO Debt

Moody's Fixed Cost Medians

State	2015 Debt Service	2015 OPEB Contribution	2015 Pension Contribution	FY 2015 Fixed Costs (Contribution)	FY 2014 Fixed Costs (Contribution)
Rhode Island (Aa2/AA/AA)	6.4%	1.4%	6.0%	13.7%	12.3%
Alabama (Aa1/AA/AA+)	3.9%	1.3%	2.0%	7.2%	7.3%
Alaska (Aa2/AA+/AA+)	2.4%	2.2%	2.5%	7.2%	6.0%
Arizona (Aa2/AA/)**	4.4%	0.2%	2.0%	6.6%	6.8%
Arkansas (Aa1/AA/)	4.1%	0.6%	2.5%	7.2%	6.7%
Colorado (Aa1/AA/)**	2.5%	0.4%	3.4%	6.3%	7.4%
Connecticut (Aa3/AA-/AA-)	14.3%	3.1%	12.2%	29.5%	27.4%
Hawaii (Aa1/AA+/AA)	10.9%	5.7%	5.1%	21.6%	24.1%
ldaho (Aa1/AA+/AA+)	1.6%	0.2%	1.6%	3.3%	3.4%
Kansas (Aa2/AA-/)**	3.4%	0.2%	6.0%	9.6%	8.2%
Louisiana (Aa3/AA/AA-)	3.1%	1.5%	5.8%	10.4%	21.9%
Maine (Aa2/AA/AA)	5.1%	2.2%	6.8%	14.1%	12.9%
Massachusetts (Aa1/AA+/AA+)	11.7%	2.0%	5.6%	19.3%	20.2%
Michigan (Aa1/AA-/AA)	2.5%	2.6%	4.8%	9.9%	8.5%
Minnesota (Aa1/AA+/AAA)	3.7%	0.3%	1.0%	5.0%	4.6%
Mississippi (Aa2/AA/AA)	6.0%	0.4%	2.2%	8.6%	10.9%
Montana (Aa1/AA/AA+)	1.3%	0.4%	5.9%	7.6%	3.6%
Nevada (Aa2/AA/AA+)	5.6%	0.8%	3.7%	10.0%	10.9%
New Hampshire (Aa1/AA/AA+)	4.7%	3.0%	2.1%	9.7%	10.0%
New York (Aa1/AA+/AA+)	7.6%	1.7%	1.7%	11.0%	13.2%
North Dakota (Aa1/AA+/)	0.5%	0.2%	0.6%	1.3%	2.2%
Ohio (Aa1/AA+/AA+)	5.2%	0.3%	1.3%	6.7%	6.8%
Oklahoma (Aa2/AA+/AA+)	2.6%	0.5%	6.8%	9.9%	9.8%
Oregon (Aa1/AA+/AA+)	5.7%	0.2%	1.2%	7.1%	8.4%
Pennsylvania (Aa3/AA-/AA-)	3.8%	2.5%	7.1%	13.4%	12.5%
Washington (Aa1/AA+/AA+)	8.3%	0.3%	1.9%	10.5%	11.1%
West Virginia Aa1/AA-/AA)	6.2%	1.9%	8.5%	16.6%	24.2%
Wisconsin (Aa2/AA/AA)	6.8%	0.2%	1.5%	8.5%	9.7%

Source: Moody's US: Medians - Low Returns, Weak Contributions Drive Growth of State Pension Liabilities, October 6, 2016.

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^{*} Fiscal 2015 pension data is not directly comparable with previous years because of new accounting standards. For most states, the data are a restatement of 2014 liabilities and set a new baseline for the trend going forward.

^{**} Based on Issuer Rating, no GO Debt

Moody's Fixed Cost Medians

State	2015 Debt Service	Own Source Revenues	OPEB Contribution	Pension Contribution
Rhode Island (Aa2/AA/AA)	\$271,225,000	\$4,237,890,625	\$59,330,469	\$254,273,438
Alabama (Aa1/AA/AA+)	N/A	N/A	N/A	N/A
Alaska (Aa2/AA+/AA+)	\$135,335,000	\$5,638,958,333	\$124,057,083	\$140,973,958
Arizona (Aa2/AA/)**	\$673,652,000	\$15,310,272,727	\$30,620,545	\$306,205,455
Arkansas (Aa1/AA/)	\$379,938,000	\$9,266,780,488	\$55,600,683	\$231,669,512
Colorado (Aa1/AA/)**	\$344,780,000	\$13,791,200,000	\$55,164,800	\$468,900,800
Connecticut (Aa3/AA-/AA-)	\$2,617,022,000	\$18,300,853,147	\$567,326,448	\$2,232,704,084
Hawaii (Aa1/AA+/AA)	\$755,669,000	\$6,932,743,119	\$395,166,358	\$353,569,899
Idaho (Aa1/AA+/AA+)	\$84,818,000	\$5,301,125,000	\$10,602,250	\$84,818,000
Kansas (Aa2/AA-/)**	\$297,883,000	\$8,761,264,706	\$17,522,529	\$525,675,882
Louisiana (Aa3/AA/AA-)	\$399,816,000	\$12,897,290,323	\$193,459,355	\$748,042,839
Maine (Aa2/AA/AA)	\$230,491,000	\$4,519,431,373	\$99,427,490	\$307,321,333
Massachusetts (Aa1/AA+/AA+)	\$3,667,371,000	\$31,345,051,282	\$626,901,026	\$1,755,322,872
Michigan (Aa1/AA-/AA)	\$773,890,000	\$30,955,600,000	\$804,845,600	\$1,485,868,800
Minnesota (Aa1/AA+/AAA)	\$943,036,000	\$25,487,459,459	\$76,462,378	\$254,874,595
Mississippi (Aa2/AA/AA)	\$527,052,000	\$8,784,200,000	\$35,136,800	\$193,252,400
Montana (Aa1/AA/AA+)	\$40,720,000	\$3,132,307,692	\$12,529,231	\$184,806,154
Nevada (Aa2/AA/AA+)	\$273,672,000	\$4,887,000,000	\$39,096,000	\$180,819,000
New Hampshire (Aa1/AA/AA+)	\$158,164,000	\$3,365,191,489	\$100,955,745	\$70,669,021
New York (Aa1/AA+/AA+)	\$7,126,246,000	\$93,766,394,737	\$1,594,028,711	\$1,594,028,711
North Dakota (Aa1/AA+/)	\$30,502,000	\$6,100,400,000	\$12,200,800	\$36,602,400
Ohio (Aa1/AA+/AA+)	\$1,736,153,000	\$33,387,557,692	\$100,162,673	\$434,038,250
Oklahoma (Aa2/AA+/AA+)	\$281,031,000	\$10,808,884,615	\$54,044,423	\$735,004,154
Oregon (Aa1/AA+/AA+)	\$730,400,000	\$12,814,035,088	\$25,628,070	\$153,768,421
Pennsylvania (Aa3/AA-/AA-)	\$1,563,577,000	\$41,146,763,158	\$1,028,669,079	\$2,921,420,184
Washington (Aa1/AA+/AA+)	\$1,882,067,000	\$22,675,506,024	\$68,026,518	\$430,834,614
West Virginia Aa1/AA-/AA)	\$416,925,000	\$6,724,596,774	\$127,767,339	\$571,590,726
Wisconsin (Aa2/AA/AA)	\$1,271,555,000	\$18,699,338,235	\$37,398,676	\$280,490,074

Source: Moody's US: Medians - Low Returns, Weak Contributions Drive Growth of State Pension Liabilities, October 6, 2016.

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^{*} Fiscal 2015 pension data is not directly comparable with previous years because of new accounting standards. For most states, the data are a restatement of 2014 liabilities and set a new baseline for the trend going forward.

^{**} Based on Issuer Rating, no GO Debt

Fitch Estimated State Net Tax-Supported Debt and Unfunded Pension Obligations

State	Debt as % of Personal Income	Fitch Adjusted Pension Allocation as % of Personal Income	Debt & Adjusted Pension Allocation as % of Personal Income	State 2013*/2014 Funded Ratio (as reported)	Teacher 2013*/2014 Funded Ratio (as reported)	State 2013*/2014 % of ADEC Funded	Teacher 2013*/2014 % of ADEC Funded
Rhode Island (Aa2/AA/AA)	4.0%	6.6%	10.6%	56.1%	58.2%	100.0%	100.0%
Alabama (Aa1/AA/AA+)	2.1%	6.1%	8.2%	65.7%*	66.2%*	100%*	100%*
Alaska (Aa2/AA+/AA+)	2.7%	11.2%	14.0%	54.5%*	48.1%*	106.8%*	102.5%*
Arizona (Aa2/AA/)**	2.4%	1.9%	4.3%	76.3%		100.0%	
Arkansas (Aa1/AA/)	1.7%	2.2%	3.9%	77.8%	77.3%	100.0%	83.3%
Colorado (Aa1/AA/)**	0.6%	4.8%	5.4%	57.8%		83.1%	
Connecticut (Aa3/AA-/AA-)	9.1%	14.2%	23.2%	41.5%	59.0%	100.0%	100.0%
Hawaii (Aa1/AA+/AA)	10.2%	11.5%	21.7%	61.4%		92.6%	
Idaho (Aa1/AA+/AA+)	1.4%	0.8%	2.2%	92.9%		95.7%	
Kansas (Aa2/AA-/)**	2.4%	6.3%	8.7%	62.3%		79.4%	
Louisiana (Aa3/AA/AA-)	3.6%	12.4%	16.0%	59.3%	57.4%	86.3%	103.3%
Maine (Aa2/AA/AA)	2.3%	4.6%	6.8%	81.4%^	81.4%^	100%^	100%^
Massachusetts (Aa1/AA+/AA+)	9.2%	9.7%	18.9%	67.5%	56.3%*	79.8%	80.8%*
Michigan (Aa1/AA-/AA)	1.9%	2.2%	4.1%	60.3%*		112.9%*	
Minnesota	3.2%	2.6%	5.8%	83.0%	74.1%	65.6%	65.0%
(Aa1/AA+/AAA) Mississippi (Aa2/AA/AA)	5.2%	7.1%	12.2%	61.0%		105.2%	
Montana	0.6%	5.3%	5.9%	74.4%	65.4%	94.0%	100.0%
(Aa1/AA/AA+) Nevada	1.9%	2.7%	4.6%	71.5%		93.1%	
(Aa2/AA/AA+) New Hampshire	1.6%	1.5%	3.1%	60.7%		100.0%	
(Aa1/AA/AA+) New York	5.0%	1.1%	6.0%	88.5%*		100%*	
(Aa1/AA+/AA+) North Dakota	0.4%	1.6%	2.1%	64.5%	61.8%	57.2%	104.8%
(Aa1/AA+/) Ohio	2.3%	0.9%	3.2%	83.8%*	69.3%	100%*	90.9%
(Aa1/AA+/AA+) Oklahoma	1.1%	4.6%	5.8%	88.6%	63.2%	108.2%	117.3%
(Aa2/AA+/AA+) Oregon	4.8%	0.9%	5.7%	95.9%*		100%*	
(Aa1/AA+/AA+) Pennsylvania	2.7%	6.5%	9.3%	59.4%		76.9%	
(Aa3/AA-/AA-) Washington (Aa1/AA+/AA+)	5.7%	2.8%	8.5%	Plan 1: 61.0% Plan 2/3: 90.0%	Plan 1: 68.7% Plan 2/3: 93.6%	Plan 1: 102.2% Plan 2/3: 97.4%	Plan 1: 96.4% Plan 2/3: 97.7%
West Virginia Aa1/AA-/AA)	2.6%	8.9%	11.5%	79.7%*	57.9%*	96.6%*	113%*
Wisconsin (Aa2/AA/AA)	5.2%	0.2%	5.4%	100.0%		100.0%	

Source: Fitch 2015 State Pension Update, October 15, 2015. ADEC: Actuarially determined employer contribution

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^{*} Based on FY 2013 information.

^{**} Based on Issuer Rating, no GO Debt

^{***} The Funded ratios are based on the reported valuation date of each system rather than the financial statement date.

[^] Maine State Employee and Teacher Plan System reorganized from agent to cost-sharing multiple-employer plan.

Standard & Poor's Total State Debt and Liabilities Per Capita as Percent of GSP Per Capita

State	State NPL Per Capita	Debt Per Capita	OPEB Per Capita	Debt, Pension & OPEB Per Capita	Debt, Pension & OPEB Per Capita As % of GSP Per Capita
Rhode Island	\$3,051	\$1,708	\$630	\$5,389	10%
(Aa2/AA/AA) Alabama	4-11	4000	40.00-	4.000	
(Aa1/AA/AA+)	\$711	\$982	\$2,395	\$4,088	10%
Alaska (Aa2/AA+/AA+)	\$7,405	\$1,396	\$9,086	\$17,887	25%
Arizona (Aa2/AA/)**	\$716	\$652	\$52	\$1,420	3%
Arkansas (Aa1/AA/)	\$515	\$607	\$637	\$1,759	4%
Colorado (Aa1/AA/)**	\$1,676	\$436	\$233	\$2,345	4%
Connecticut	\$7,660	\$5,707	\$6,116	\$19,483	27%
(Aa3/AA-/AA-) Hawaii (Aa1/AA+/AA)	\$4,328	\$4,520	\$5,958	\$14,806	27%
Idaho (Aa1/AA+/AA+)	\$215	\$134	\$52	\$401	1%
Kansas (Aa2/AA-/)**	\$2,383	\$1,085	\$148	\$3,616	7%
Louisiana (Aa3/AA/AA-)	\$1,302	\$1,602	\$1,090	\$3,994	8%
Maine (Aa2/AA/AA)	\$1,481	\$691	\$1,402	\$3,574	8%
Massachusetts (Aa1/AA+/AA+)	\$4,451	\$5,122	\$2,339	\$11,912	17%
Michigan (Aa1/AA-/AA)	\$618	\$838	\$952	\$2,408	5%
Minnesota (Aa1/AA+/AAA)	\$546	\$1,585	\$121	\$2,252	4%
Mississippi (Aa2/AA/AA)	\$1,018	\$1,751	\$245	\$3,014	8%
Montana (Aa1/AA/AA+)	\$1,665	\$175	\$452	\$2,292	5%
Nevada (Aa2/AA/AA+)	\$664	\$635	\$494	\$1,793	4%
New Hampshire (Aa1/AA/AA+)	\$611	\$725	\$2,100	\$3,436	6%
New York (Aa1/AA+/AA+)	\$74	\$2,538	\$3,932	\$6,544	9%
North Dakota (Aa1/AA+/)	\$481	\$107	\$91	\$679	1%
Ohio (Aa1/AA+/AA+)	\$251	\$975	\$1,310	\$2,536	5%
Oklahoma (Aa2/AA+/AA+)	\$483	\$542	\$1	\$1,026	2%
Oregon (Aa1/AA+/AA+)	\$271	\$1,966	\$60	\$2,297	4%
Pennsylvania (Aa3/AA-/AA-)	\$981	\$1,483	\$1,608	\$4,072	8%
Washington (Aa1/AA+/AA+)	\$372	\$2,552	\$95	\$3,019	5%
West Virginia Aa1/AA-/AA)	\$2,012	\$1,050	\$52	\$3,114	8%
Wisconsin (Aa2/AA/AA)	-\$119	\$2,207	\$16	\$2,104	4%

Source: Standard & Poor's U.S. State Pensions: Weak Market Returns Will Contribute to Rise in Expense, September 12, 2016

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^{*} Chart reflects information as of FY2015

^{**} Based on Issuer Rating, no GO Debt